



41426-FA-PCT-US
SEQUENCE LISTING

<110> Israeli, Ron S.

Heston, Warren D.W.

Fair, William R.

<120> PROSTATE-SPECIFIC MEMBRANE ANTIGEN AND USES THEREOF

<130> 1769/41426-FA-PCT-US

<140> 10/751,346

<141> 1998-01-02

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tgcagttgac cctattttt gaa cattcat tcccccttac ccctgtttct gttcctgcca	240
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aaatcttagtg tggtttacat aatcacctgt tagagat tttt aaattatttc aggataagtc	420
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agatattctg aattttaatt tctcttgcc actttcactg aaaaagagtc atgcaaacag		180
attttaagt tgcaaaccua ttgcaaaata ttttttatac caacttcaat gataggatt		240
gctgttaatt ctaagatatg cattaattgt ttcaactaat gggtgtcaaa cgagatgttc		300
tgaaaatgaa ggcaaaaagg gatccacctt ctacttcat aaagtttcta tcttcctctg		360
ctgactcaa taagcatta atacattta taacgaatta attatgaata atatttcaa		420
taaataaatt atttccaagt gttgaaggaa attcagactt ctaatttgct ctgattctga		480
aactaaaaca aatgctctgt gagagttgc gttccagtg aagtagcgtg agaaatccaa		540
gtcagacagc tacatgaaac tacatttacc agctctctgc cagacaccag tgcacgatag		600

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aaagaaaat tccccccat ttattat ttcataacc ttctatgaaa taatgttcta	180
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tcccaaagtt gtatattac acgtgtgagg cactgcgcct tgccaggaga tacattttg	720
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ctcaaaaatgg ttagatctat tcagggaaaca aagctaaaaa aaccccacca ataactaaaa	240
atcaacccaa taaaaacaa caatcataaa ataagtaagt acctatagaa agaaaagctc	300
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cagggtgact tctnctcn aatccagctc tctntcacag atgtgatcca agagacactc	720
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gagtggttct gttctggaat ttagtatata catgagttttc tagtgtatgt cagccatgaa 180
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<223> n=any nucleotide

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ccagcactat gctagaagtt gtgaagaatt cacgagatga ataaatcaca gattctgtcc	180
tcaaaaatggt tagatctatt cagggaaacaa agctaaaaaa accccaccaa taactaaaaaa	240
tcaaccaaata gaaaaacaac aatcataaaa taagtaagta cctatagaaa gaaaagctca	300
gaggaggtaa aaagataact cttccaaaag gaatactata tactgtaaac tgtgtactga	360
tagaaggaag aattagaaaan nnnnnnntgt aagtggcata catactaagc tagtgtgaac	420
acaaggctaa atatgttagt gcttcacaga aggttagaa taaattaacc tcatgaattt	480
cttgagagaa cttgtaagga ctaagcttc gatttggag aaagattta ataccaaata	540
aaaagtacct ttgtttggta atctcaatca ttataatagt gcttagataa tacctaggaa	600
caaattaaat attaaattta cttaaaaaa aagtacatga ttggggatc acaactggcc	660
ttactagatt ctctnnnnn atatgcactg aaaagaatga aaaacactga accaaatatn	720
tgtttttta agttttaaat taaattggaa aaaaatagta aggaatatca gaagcaaaaaa	780
aataaaatga aagcaagaat cctcagaggt agcacgaaat ttggcttgc ttagatggat	840
ctatcaaagc tatggcccat gaaaaggatt caggagttag tttaaagctg gttcacataa	900
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tgagggggct cacnctnaat nccagcactt tgggagccca aggtgggtgg atcacgaggt	1020
caggagtttgc agaccagcct gaccaacatg gtgaaaccgc gtctctacta aaaatagaaa	1080
aattagccgn gcctacgtgc ttctaatccc agctgaactc aggagactga gacaggagaa	1140
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<211> 783

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<213> HOMO SAPIENS

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atgcccacct tacagagagg acacatttac tagtttat cccgggtta aattcgagca 180
ttggaatttg gccagtgtag atgttagag tgaacagaac aaattttct gtgcctacag 240
gttatggctg tggcctacaa gaagcatgca ctgggttat tattaacttt cagtatctt 300
gttttaataa ttttctacaa aaatgtttac taaattaaat ttagtatga attgttataa 360
ataatgaggg aaaacaattt acacatagca aataaaaaa ttactgtcat ttgattttgtt 420
aatatatttt tctcttttagt gggaaattaa atttaaaaaa attcccttc gactgttagaa 480
caaataggaa tttggcctgt ggggtctact tgcttattat attttaagc tagtggtagg 540
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tttagagctt atagtagcaa aaagaaaagg gaaattctat ccgagatgtc cttgttgta 660
ggcctaataatga gaaaagggtt aagataaaatg tctggtactc atttaagtgt aatattgaaa 720
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cctacaacaa aggacatctc ggatagaatt tccctttct ttttgctact ataagctcta 180

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aaaatcctca gaacatcaga ttttagaaatg ttcttattag tggttagtgag catttgctat	240
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tgttctacag tcgaaaggga atttttaaa atttaatttc ccactaaaga gaaaaatata	360
ttaacaaatc aaatgacagt aattttaaa tttgctatgt gtaaattgtt ttccctcatt	420
atttataaca attcatacta caatttaatt tagtaaacat ttttgttagaa aatatttaaa	480
acaaagatac tgaaagttaa tatnaaaccc agtgcatgct tctttaggc cacagccata	540
acctgtaagc acagaaaaat ttgttctgtt actctaaaca tctacactgg ccaaattcca	600
atgctcgaat ttaaccccg gatataacct agtaaatgtg tcctctctgt aaggtggca	660
tgtcacagaa tacaagaaaa taatggtatt cataaagttt taagaaaaatg attctacaca	720
tgtaaaaccc actataactt tttacattgg gggagagaaa aaaagagata attttacct	780
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<212> DNA

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gagtggttct gttctggaat ttagtatata catgagtatc tagtgtatgt cagccatgaa	180
aatgaacctt tcagatgttt aacttcaggg aacctaattt agtcattgtt ccagacattt	240
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ccttgatagc tcttaaatag atgctgcacc aacactctt ttctttctc tctttttctt	420
tattcaatat tagactacaa gcagtctaag gacttctcag ggtttcttagc tctctctcat	480
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taacnnnnnnn cttccatttt gtttttatct ctattcttctt tccccttctg ctggggcttggaa	600
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nnnnnnnnntt caccatngct gatcaggctg gtctcgaaact cctgaccgca gtgantccgc	960
cctccttggc ctcccaaagt gctgagatca cagggatgag tcactgcgnc cagccaccat	1020

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tattctctag aggtgagaga acactggctc ttctaaacaag ttgaaatttg atagagacc 1079

<210> 127

<211> 1977

<212> DNA

<213> HOMO SAPIENS

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		atacgtcatt taaaccttac cataattctg aggaattgct acctccactt cacagatggg	180
		gcacaggagg cttagataac atgcccuaag tcattgtct agtaaatgga tataattaag	240
		attcaaatta ttgataagaa ttgtatctgc cttaccagta tctagtagta aatctaaaag	300
		cgcttccag agcatgtgct gttgatagag ctgtatgtct aactctctga aattttccat	360
		tcttatttgt ctcactggta tatagttatt tttaactact ttcatcacacc tactaagaag	420
		acaggaggat caaagatagg atttcattta gaatgcctaa agcttcacgt attttaattc	480
		agaataagat tcaggcagac caccagtata tgccatggc cctggttatc tttcagcagg	540
		tgaccgagaa agaaaacatg gtaatgtta tgaaatggtg ggttcttcta gtttcacttc	600
		aacatatctg ccttactgt attaagatga tggattaact tattcttcat atggcatgt	660
		aaaacaatat acttttacta aacagctaca gagagacaaa tgtgtttcca gacaaactta	720
		agagactgag ttttcaact gaataatctc gaccttaatt gtaactatata ttatgaaat	780
		ccagctgtaa ggcaaaaaaca gacttcttgc ggcctaccac gggcattttg ttccgttan	840
		nnntactcca aaccttaaac ccacgtccac ttaaataatg gcctggaaat aaatgtcatt	900
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		ctgttaagctt tctctgcgtt cacgaccctc atgcactcag gctgtgcgtt gcagcatgct	1020
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		gaaatatgaa tacgtnnnnn nctagaatct actgcacatg caataaggaa acaatcagta	1140
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		aaagtgtaaa taattccctt ctctttcccc ttttcaactt aggagttgt atattaaaca	1260
		gaatttcaag taatgttata taaaatttt taanntattt acaataaaaat gccacgtata	1320
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		tacataaaaat attgatacag gaggtagaaa gaaatttagt aagcagataa tggggcaac	1500
		agagtccctca gcagagcttc cttcttaaca aaaagcagcc caataaaat ttttttttt	1560
		ctaacaaaaa gcagcctgaa aaatcgagct gcaaacatag attagcaatc ggctgaaagt	1620
		gcgggagaat gctggcagct gtgccaatag taaaggctt cctggagccg ggccgtggc	1680
		tcacgctgtt atcccagcac tttgggaggg cgaggcaacg cggatcacct gaggtcggg	1740
		gtttgagatc agcccgacca acatggagaa accccgtctc tactaaaaaa aaaaaaaaaa	1800
		aaaggcaaaa aatgagccgg gcatggtggc acatgccttgc cacatcccag ctgaggcagg	1860
		agaatttcaact tgaacctggg aggttagagat tgcggtgaag cgagatcact tcattgcact	1920

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<210> 128

<211> 750

<212> PRT

<213> Homo sapiens

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Arg Pro Arg Trp Leu Cys Ala Gly Ala Leu Val Leu Ala Gly Gly Phe
20 25 30

Phe Leu Leu Gly Phe Leu Phe Gly Trp Phe Ile Lys Ser Ser Asn Glu
35 40 45

Ala Thr Asn Ile Thr Pro Lys His Asn Met Lys Ala Phe Leu Asp Glu
50 55 60

Leu Lys Ala Glu Asn Ile Lys Lys Phe Leu Tyr Asn Phe Thr Gln Ile
65 70 75 80

Pro His Leu Ala Gly Thr Glu Gln Asn Phe Gln Leu Ala Lys Gln Ile
85 90 95

Gln Ser Gln Trp Lys Glu Phe Gly Leu Asp Ser Val Glu Leu Ala His
100 105 110

Tyr Asp Val Leu Leu Ser Tyr Pro Asn Lys Thr His Pro Asn Tyr Ile
115 120 125

Ser Ile Ile Asn Glu Asp Gly Asn Glu Ile Phe Asn Thr Ser Leu Phe
130 135 140

Glu Pro Pro Pro Gly Tyr Glu Asn Val Ser Asp Ile Val Pro Pro
145 150 155 160

Phe Ser Ala Phe Ser Pro Gln Gly Met Pro Glu Gly Asp Leu Val Tyr
165 170 175

Val Asn Tyr Ala Arg Thr Glu Asp Phe Phe Lys Leu Glu Arg Asp Met
180 185 190

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Lys Ile Asn Cys Ser Gly Lys Ile Val Ile Ala Arg Tyr Gly Lys Val
195 200 205

Phe Arg Gly Asn Lys Val Lys Asn Ala Gln Leu Ala Gly Ala Lys Gly
210 215 220

Val Ile Leu Tyr Ser Asp Pro Ala Asp Tyr Phe Ala Pro Gly Val Lys
225 230 235 240

Ser Tyr Pro Asp Gly Trp Asn Leu Pro Gly Gly Gly Val Gln Arg Gly
245 250 255

Asn Ile Leu Asn Leu Asn Gly Ala Gly Asp Pro Leu Thr Pro Gly Tyr
260 265 270

Pro Ala Asn Glu Tyr Ala Tyr Arg Arg Gly Ile Ala Glu Ala Val Gly
275 280 285

Leu Pro Ser Ile Pro Val His Pro Ile Gly Tyr Tyr Asp Ala Gln Lys
290 295 300

Leu Leu Glu Lys Met Gly Gly Ser Ala Pro Pro Asp Ser Ser Trp Arg
305 310 315 320

Gly Ser Leu Lys Val Pro Tyr Asn Val Gly Pro Gly Phe Thr Gly Asn
325 330 335

Phe Ser Thr Gln Lys Val Lys Met His Ile His Ser Thr Asn Glu Val
340 345 350

Thr Arg Ile Tyr Asn Val Ile Gly Thr Leu Arg Gly Ala Val Glu Pro
355 360 365

Asp Arg Tyr Val Ile Leu Gly Gly His Arg Asp Ser Trp Val Phe Gly
370 375 380

Gly Ile Asp Pro Gln Ser Gly Ala Ala Val Val His Glu Ile Val Arg
385 390 395 400

Ser Phe Gly Thr Leu Lys Lys Glu Gly Trp Arg Pro Arg Arg Thr Ile
405 410 415

Leu Phe Ala Ser Trp Asp Ala Glu Glu Phe Gly Leu Leu Gly Ser Thr
420 425 430

Glu Trp Ala Glu Glu Asn Ser Arg Leu Leu Gln Glu Arg Gly Val Ala
435 440 445

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Tyr Ile Asn Ala Asp Ser Ser Ile Glu Gly Asn Tyr Thr Leu Arg Val
450 455 460

Asp Cys Thr Pro Leu Met Tyr Ser Leu Val His Asn Leu Thr Lys Glu
465 470 475 480

Leu Lys Ser Pro Asp Glu Gly Phe Glu Gly Lys Ser Leu Tyr Glu Ser
485 490 495

Trp Thr Lys Lys Ser Pro Ser Pro Glu Phe Ser Gly Met Pro Arg Ile
500 505 510

Ser Lys Leu Gly Ser Gly Asn Asp Phe Glu Val Phe Phe Gln Arg Leu
515 520 525

Gly Ile Ala Ser Gly Arg Ala Arg Tyr Thr Lys Asn Trp Glu Thr Asn
530 535 540

Lys Phe Ser Gly Tyr Pro Leu Tyr His Ser Val Tyr Glu Thr Tyr Glu
545 550 555 560

Leu Val Glu Lys Phe Tyr Asp Pro Met Phe Lys Tyr His Leu Thr Val
565 570 575

Ala Gln Val Arg Gly Gly Met Val Phe Glu Leu Ala Asn Ser Ile Val
580 585 590

Leu Pro Phe Asp Cys Arg Asp Tyr Ala Val Val Leu Arg Lys Tyr Ala
595 600 605

Asp Lys Ile Tyr Ser Ile Ser Met Lys His Pro Gln Glu Met Lys Thr
610 615 620

Tyr Ser Val Ser Phe Asp Ser Leu Phe Ser Ala Val Lys Asn Phe Thr
625 630 635 640

Glu Ile Ala Ser Lys Phe Ser Glu Arg Leu Gln Asp Phe Asp Lys Ser
645 650 655

Asn Pro Ile Val Leu Arg Met Met Asn Asp Gln Leu Met Phe Leu Glu
660 665 670

Arg Ala Phe Ile Asp Pro Leu Gly Leu Pro Asp Arg Pro Phe Tyr Arg
675 680 685

His Val Ile Tyr Ala Pro Ser Ser His Asn Lys Tyr Ala Gly Glu Ser
690 695 700

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Phe Pro Gly Ile Tyr Asp Ala Leu Phe Asp Ile Glu Ser Lys Val Asp
705 710 715 720

Pro Ser Lys Ala Trp Gly Glu Val Lys Arg Gln Ile Tyr Val Ala Ala
725 730 735

Phe Thr Val Gln Ala Ala Ala Glu Thr Leu Ser Glu Val Ala
740 745 750